MANUFACTURING METHOD FOR MONOLITHIC PIEZOELECTRIC PART, AND MONOLITHIC PIEZOELECTRIC PART

ABSTRACT OF THE DISCLOSURE

A monolithic piezoelectric part capable of yielding a high piezoelectric d constant and suppressing reduction in reliability such as deterioration in insulation resistance can be obtained by a method for manufacturing a monolithic piezoelectric part wherein a piezoelectric ceramic body is formed of a perovskite compound oxide expressed by the general formula of ABO₃, and the molar quantity of the A site component, Pb, is reduced by about 0.5 mol% to 5.0 mol% from that of the stoichiometric composition, ceramic raw materials are combined so that the average valence of the B site component is greater than quadrivalent, which is the same as the stoichiometric composition, to synthesize the ceramic powdered raw material, which is processed subsequently to fabricate a layered article, and the layered article is subjected to sintering processing within an atmosphere wherein the oxygen concentration is about 5% or less but more than 0% by volume.